

PROBLEM SUMMARY

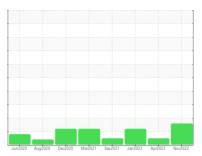
Sample Rating Trend

ISO

Machine Id KAESER SK20 7118870 (S/N 1368)

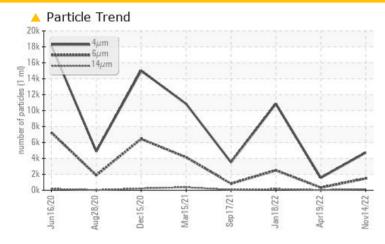
Compressor

KAESER SIGMA (OEM) S-460 (--- QTS)





COMPONENT CONDITION SUMMARY



RECOMMENDATION

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

| PROBLEMATIC TEST RESULTS | | | | | | | |
|--------------------------|--------------|---------|-----------------|--------|-------------------------------|--|--|
| Sample Status | | | ATTENTION | NORMAL | ABNORMAL | | |
| Particles >6µm | ASTM D7647 | >1300 | 1477 | 333 | <u>\$\text{\scale}\$ 2508</u> | | |
| Particles >14µm | ASTM D7647 | >80 | 122 | 27 | <u></u> ▲ 157 | | |
| Particles >21µm | ASTM D7647 | >20 | <u>^</u> 29 | 10 | △ 35 | | |
| Oil Cleanliness | ISO 4406 (c) | >/17/13 | 19/18/14 | 16/12 | <u> </u> | | |

Customer Id: HIGLOD Sample No.: KC97476 Lab Number: 05719910 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS

| Action | Status | Date | Done By | Description |
|---------------|--------|------|---------|---|
| Change Fluid | | | ? | Oil and filter change at the time of sampling has been noted. |
| Change Filter | | | ? | Oil and filter change at the time of sampling has been noted. |

HISTORICAL DIAGNOSIS

19 Apr 2022 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



18 Jan 2022 Diag: Angela Borella

ISO



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



17 Sep 2021 Diag: Don Baldridge

NORMAL

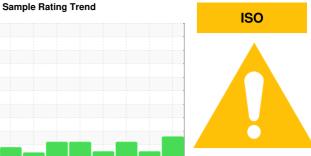


Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT



KAESER SK20 7118870 (S/N 1368)

Compressor

KAESER SIGMA (OEM) S-460 (--- QTS)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of particulates present in the oil.

Fluid Condition

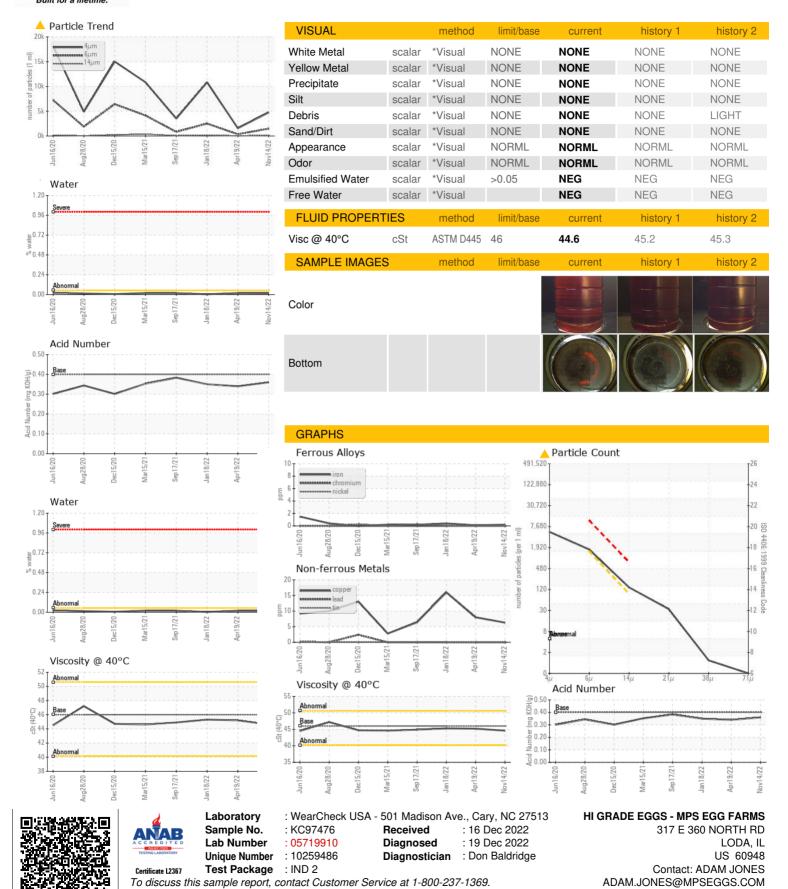
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| | | Jun2020 A | ug2020 Dec2020 Mar20 | 21 Sep2021 Jan2022 Apr2022 | Nov2022 | |
|------------------|----------|--------------|----------------------|----------------------------|-------------|----------------|
| SAMPLE INFORM | MATION | method | limit/base | current | history 1 | history 2 |
| Sample Number | | Client Info | | KC97476 | KC73436 | KC96127 |
| Sample Date | | Client Info | | 14 Nov 2022 | 19 Apr 2022 | 18 Jan 2022 |
| Machine Age | hrs | Client Info | | 23597 | 19976 | 17794 |
| Oil Age | hrs | Client Info | | 5803 | 2182 | 9000 |
| Oil Changed | | Client Info | | Changed | Not Changd | Changed |
| Sample Status | | | | ATTENTION | NORMAL | ABNORMAL |
| WEAR METALS | | method | limit/base | current | history 1 | history 2 |
| Iron | ppm | ASTM D5185m | >50 | <1 | <1 | <1 |
| Chromium | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | 0 | <1 | <1 |
| Aluminum | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Lead | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >50 | 6 | 8 | 16 |
| Tin | ppm | ASTM D5185m | >10 | 0 | 0 | <1 |
| Antimony | ppm | ASTM D5185m | | | | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history 1 | history 2 |
| Boron | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Barium | ppm | ASTM D5185m | 90 | 3 | 46 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | 90 | 31 | 50 | 9 |
| Calcium | ppm | ASTM D5185m | 2 | 0 | 2 | 0 |
| Phosphorus | ppm | ASTM D5185m | | 2 | 12 | 4 |
| Zinc | ppm | ASTM D5185m | | 41 | 42 | 79 |
| CONTAMINANTS | ; | method | limit/base | current | history 1 | history 2 |
| Silicon | ppm | ASTM D5185m | >25 | <1 | <1 | <1 |
| Sodium | ppm | ASTM D5185m | | 6 | 20 | 3 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 3 | 0 |
| Water | % | ASTM D6304 | >0.05 | 0.016 | 0.018 | 0.004 |
| ppm Water | ppm | ASTM D6304 | >500 | 168.5 | 186.3 | 41.5 |
| FLUID CLEANLIN | IESS | method | limit/base | current | history 1 | history 2 |
| Particles >4µm | | ASTM D7647 | | 4725 | 1563 | 10852 |
| Particles >6µm | | ASTM D7647 | >1300 | <u> </u> | 333 | <u>△</u> 2508 |
| Particles >14μm | | ASTM D7647 | >80 | <u> </u> | 27 | <u> </u> |
| Particles >21µm | | ASTM D7647 | >20 | <u>^</u> 29 | 10 | △ 35 |
| Particles >38μm | | ASTM D7647 | >4 | 1 | 1 | 0 |
| Particles >71μm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >/17/13 | <u> </u> | 16/12 | △ 19/14 |
| FLUID DEGRADA | TION | method | limit/base | current | history 1 | history 2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.4 | 0.36 | 0.34 | 0.35 |

Contact/Location: ADAM JONES - HIGLOD



OIL ANALYSIS REPORT



* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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